THE ANNALS

AND

MAGAZINE OF NATURAL HISTORY.

[EIGHTH SERIES.]

No. 14. FEBRUARY 1909.

XIII.—New Species of Indo-Malayan and African Lepidoptera. By Colonel C. Swinhoe, M.A., F.L.S., &c.

Family Hesperidæ.

Celænorhinus zea, nov.

Q. Uniform dark olive-brown above; palpi below, pectus, legs beneath, and segmental bands on the underside of the abdomen greyish ochreous: fore wings with a broad discal band much as in C. dhanda, Moore, but cut short and square on vein 2, with a small spot attached on the middle which runs below the vein, the band, which does not quite touch the costal line, white, tinged with ochreous and semihyaline; three subapical whitish dots, the middle dot inwards and attached to the upper dot, which is minute: hind wings without markings. On the underside of the fore wings the discal band is produced to the hinder angle (which it does not quite touch), the extension being caused by an adjoining large spot of the same colour as the rest of the band: hind wings without markings: antennæ broken.

Expanse of wings $1\frac{6}{10}$ inch. Khasia Hills; one example.

Apparently a perfectly distinct form; the band on the underside of the fore wings is very similar to the band on the underside of the fore wings of *C. affinis*, Elwes, which I also

Ann. & Mag. N. Hist. Ser. S. Vol. iii.

have from the same locality, but the upperside is quite different, and the subapical dots of that species are almost linear and joined together.

Parnara entebbea, nov.

3 ? Of a uniform very dark blackish-brown colour, very nearly pure black; fore and middle legs and hind tarsi orange-ochreous beneath: fore wings above with two discal hyaline spots, the lower the larger, slightly produced outwards at its lower end; three small subapical hyaline spots, the middle spot inwards; in the female there is an indistinct discal lower minute spot. On the underside, which is as black as the upperside, the inner marginal space of the fore wings is broadly pale, the spots are as above; no other markings above or below.

Expanse of wings $1\frac{1}{2}$ inch. Entebbe, Uganda; $7 \, 3$, 1 ?.

There is a male from Uganda unnamed in the B. M.; in one example the middle subapical spot is absent.

Hasora almea, nov.

3. Of a uniform dark olive-brown colour above; palpi on the underside with white and brown hairs, the collar below almost pure white; body and legs brown; abdomen with thin whitish segmental bands beneath: fore wings above with a rather prominent, semilyaline, white, central discal spot in the interspace between veins 3 and 4; no other markings above; the fore wings below with a broad metallic bluegreen costal band from the base to one-third from the apex. the interior of the wing filled np with an acutely cut triangular dark brown space, without any pale line limiting its outer side, the discal spot smaller than it is above, and another and still smaller white spot below it and on the inner side of it: hind wings with a very thin and straight discal white line, not touching the costa and slightly thickened before the anal angle, where it is broken by the upper portion of the large black patch; a thin white anteciliar short streak running from the black patch; all the wing from the band to the base thick with metallic blue-green scales.

Expanse of wings $1\frac{9}{10}$ inch.

Brunnei, N. Borneo; one example.

The hind wing on the underside is marked very similarly to *H. meala*, Swinhoe, but that form has no anal black patch and is of a different shape; almea has the shape of chromus.

Hasora amboinensis, nov.

3 2. Both sexes of a uniform dark olive-brown colour above, without any markings; palpi below and pectus greyish white, thorax and abdomen below with greyish-white hairs: fore wings below with a metallic blue-green broad costal band from the base to one-third from the apex; the inner space of the wing dark brown, limited by a transverse pale shade from the costa to the middle: hind wings with a broad, white, nearly straight discal band, from the costa near the apex to the anal angle above the large black anal patch; it is nearly even for two-thirds, then narrows, and slightly enlarges again above the patch, is then broken, and has a white spot on the abdominal margin adjoining the black patch, and a short thin anteciliar white streak; the whole of the portion of the wing on the inner side of the band is metallic blue-green, and there are a few blue-green scales outside the band.

Expanse of wings 1 19 inch.

Amboina; one pair.

A female is in the B. M. mixed up with *II. alexis*, Fabr., but its shape is quite different from that of alexis. Watson very properly separates alexis from chromus, Cram., and it is difficult to understand why they are mixed up together in the B. M. collection over the name alexis with other forms into what might be called a real "job lot," merely on account of their superficial resemblance to one another.

Family Plutodidæ.

Synegia secunda, nov.

3. Pale yellow; palpi orange above, an orange spot on the frons: fore wings with an olive-brown stripe along the costal margin, a black dot at the end of the cells of both wings; fore wings with antemedial and postmedial transverse thin bands, continued across the hind wings as subbasal and medial bands; a submarginal line, continued across the upper disc of the hind wings, where it runs into a thick nearly straight band which crosses the disc of the wing from above the anal angle to the outer margin below the apex; all the bands olive-brown, and the spaces between the bands on both wings sparsely irrorated with olive-brown atoms; black marginal dots on both wings. Underside much paler, no irrorations, but the bands more or less faintly indicated.

Expanse of wings $1\frac{1}{10}$ inch. Padang, Sumatra; one example.

Family Ennomidæ.

Hypochrosis mimaria, nov.

3. Shafts of the antennæ whitish, plumes black: wings above and thorax dark olive-green grey, costa of hind wings broadly pale pink: fore wings with a broad transverse greenish-black band edged with whitish, extending upwards from the hinder margin a little before the middle, expanding above its middle, with a pale excavation on its upper edge below the costa, which it does not reach; its inner edge is slightly curved inwards above its centre and the outer edge is deeply sinuous: on the hind wing there is a very large oval-shaped greenish-black patch, edged with whitish near the abdominal margin, extending from below the middle to the base, which it does not reach; both wings are irrorated with dark greenish atoms and the cilia are pinkish grey. On the underside the body, legs, and wings are bright greyish pink; the fore wings broadly pale on the hinder margin, and there are indications of a broad brownish band from the middle near the hinder margin, gradually narrowing upwards to the apex of the wing.

Expanse of wings $1\frac{6}{10}$ inch. Padang, Sumatra; one example. Belongs to the *festivaria* group.

Hypochrosis lubricata.

Omiza lubricata, Warren, Nov. Zool. vi. p. 65 (1899).
Hypochrosis hiresia, Swinhoe, Ann. & Mag. Nat. Hist. (7) viii. p. 125 (1901).

Flores.

I overlooked Warren's description when describing this Geometer.

Family Macariidæ.

Calletæra distorta, nov.

3. Ochreous grey, uniform in coloration above; markings above much as in the common Indian Luxiaria obliquata, Moore; the shape of the hind wing, however, instead of being rounded, is convex below the middle, making the anal angle somewhat produced. On the underside the bands are somewhat similar, but the discal band of the hind wings is distorted, corresponding to the shape of the outer margin; the fore wings are uniformly greyish brown, with a large pale, nearly white, apical patch; the hind wings are pale greyish

ochreous, making the bands very prominent; marginal line on both wings below dark brown, with slight outer projections at the vein-ends; cilia nearly white; the second free vein of the hind wings bends downwards at its middle and terminates at the same point as vein 1 near the anal angle.

Expanse of wings $1\frac{1}{2}$ inch. Entebbe, Uganda; one example.

Genus Loxotephria.

Loxotephria, Warren, Nov. Zool. xii. p. 13 (1905).

Loxotephria padanga, nov.

3. Dark pinkish grey, the fore wings darker than the hind wings and of a red tint; both wings irrorated with white, the closeness of the irrorations making the costal and outer portions more or less smeared with white: fore wings with an indistinct, antemedial, straight, transverse line; both wings with postmedial and submarginal straight lines, the former commencing from the abdominal margin a little beyond the middle and the latter from near the anal angle, both extended to the apex of the fore wings, all the lines dark dull red and the cilia of the same colour. The underside is much paler and has a strong ochreous tinge, and is irrorated with pink, and both wings are crossed by parallel red straight lines, medial and discal, and there is some dark suffusion towards the outer margin of the fore wings and a large suffused red subapical spot.

Expanse of wings 1_{10}^{1} inch. Padang, Sumatra; one example.

Family Boarmiidæ.

Ectropis discolor, nov.

3. Dull pale ochreous; palpi brown above; some brown dots on the upperside of the shafts of the antennæ; abdomen with a black tuft of rather long hairs beneath, near the base: wings rather thickly irrorated and smeared in parts with olive-brown, leaving a somewhat indistinct paler central band; four transverse olive-brown lines across both wings at equal distances apart, all sinuous and mostly outwardly dentated; a more indistinct submarginal line and black marginal spots. Underside pale, nearly whitish; costa of fore wings with blackish spots; a very broad, transverse, pale blackish-brown discal band, slightly narrowing downwards, with indications of its continuation across the hind

wings; a brown lunule at the end of each cell and black marginal spots.

Expanse of wings $1\frac{1}{2}$ inch.

Padang, Sumatra; one example.

Family Geometridæ.

Lophochlora annuligera, nov.

¿. Antennæ and frons orange; head, thorax, and wings above and below pale green; abdomen, thorax below, and legs ochreous white: wings thinly clothed; costal line of fore wings orange; a round white spot, each containing a black lunule, at the end of the cell of each wing; a large white spot in the disc above the middle; various other smaller white spots here and there on the outer portion of the fore wings, two on the hinder margin and one at the apex of the hind wings; cilia of both wings white, spotted with orange.

Expanse of wings $1\frac{2}{10}$ inch. Entebbe, Uganda; one example.

Family Sterrhidæ.

Synelis acutangulata, nov.

3. White, costal line of fore wings ochreous brown; a black dot at the end of the cell of the hind wings; two ochreous-grey lines across both wings, the first medial, sinuous, and indistinct, the other acutely angulated: hind wings with a similar submarginal line; both wings with black marginal dots in the interspaces. Underside pure white, without markings.

Expanse of wings $1\frac{1}{10}$ inch.

Entebbe, Uganda; three examples.

Induna pura, nov.

3. Upperside of the shafts of the antennæ white, lower side and pectinations ochreous grey; tarsi ochreous grey; otherwise this insect is pure white above and below, without any markings.

Expanse of wings 1 inch.

Entebbe, Uganda; three examples.

Family Callidulidæ.

Callidula nemoga, nov.

9. Of a uniform dark ochreous-brown colour; palpi

beneath, pectus, legs, and abdomen beneath orange: fore wings with a broad discal orange band from the middle of costa to the hinder angle, stopping short of both; on the underside this band reaches the costa and runs narrowly along it to the base; a small suffused ochreous mark at the anal angle of the hind wings.

Expanse of wings $1\frac{4}{10}$ inch.

New Guinea, Milne Bay (type in B. M.), and one female from the same locality in my collection.

Cleis atata, nov.

3 ?. Upperside: body and wings dark blackish brown: fore wings with a large orange-ochreous patch on the outer margin above the hinder angle, with its inner side roun led: hind wings with a broad orange-ochreous marginal band, which covers half the wings; cilia of both wings black. Underside: wings black; an ochreous streak on the costa of fore wings at the base, which runs into an ochreous subcostal spot in the middle; a large ochreous patch on the outer margin above the hinder angle, with its inner edge produced into an acute angle; an ochreous spot in the male near the point of the angle, which is absent in the female, but there are two or three small ochreons marks below the subcostal spot; antennæ below marked with ochreous; palpi, body below, and legs ochreous, the legs with black stripes.

Expanse of wings, $\delta 1_{\overline{10}}^{5}$, $\circ 1_{\overline{10}}^{6}$ inch.

Ké Island; one pair.

Somewhat like C. aureola, Swinhoe, from Obi, and C. posticalis, Guérin, from Port Praslin, but the former has an ochreous discal band on the fore wings below and the latter has the ochreous on the fore wings below in the disc away from the outer margin.

Family Limacodidæ.

Scopelodes anthela, nov.

d. Antennæ, palpi, thorax, and fore wings glossy greyish brown; palpi with the brush whitish, some black hairs at the tips; abdominal half of hind wings orange-ochreous, the outer half greyish brown, paler than the fore wings; cilia of both wings whitish, no markings: abdomen orange-ochreous, with dorsal black bands on the last five segments; anal tuft black: wings below much paler than they are above, and all the veins whitish: body orange-ochreous; abdomen with a duplicate row of black spots, the space between whitish; legs greyish brown, with white hairs, the tarsi with black tips.

Q. Much paler; in some examples the fore wings are almost ochreous; in all the examples the hind wings are entirely more or less ochreous; the spots on the abdomen below are similar, but above they are more or less obsolescent.

Expanse of wings, 32, $3\frac{2}{10}$ inches.

Singapore; 10 3, 3 2 in the B. M. and in my museum (types in B. M.).

Sandakan, 1 d in B. M. Java; 1 9 in my coll.

Family Sarrothripidæ.

Hyblaa asava, nov.

3. Upperside: body and wings dark olive-brown; abdomen with indistinct whitish segmental bands: fore wing with a blackish medial thin band, straight from hinder margin to end of cell, where it is acutely angled to centre of costa, with black markings, and there are also some black markings near the apex of the wing: hind wing with three very large, almost square, orange-ochreous spots, one below the middle of the costa, another below it and a little outside of it in the disc, and the third towards the anal angle; there are also some pale ochreous hairs on the abdominal area of the wing and an ochreous mark at the base. On the underside the wings are marked in a very curious manner; the fore wing has two short yellowish-white streaks at the base, two thick ones from the costa (one central and the other outer) running halfway down the wing; the hinder margin is broadly whitish: the hind wing is all white, tinged in parts with yellow, with a blackish marginal border with brown dots above its inner side; a black streak upwards and downwards from the base; a large black ringlet from the middle of the costa, with a very small ringlet and a curled mark at its lower end: body yellow; legs yellow streaked with black.

Expanse of wings $1\frac{1}{2}$ inch. Mindoro, Philippines (type in B. M.).

Family Quadrifidæ.

Genus Leistera, nov.

Antennæ smooth, as long as two-thirds of the costa; palpi smooth, reaching vertex of head; thorax somewhat hairy; fore wing with long flocculent hairs from median vein below, filling up the entire cell; venation of both wings as in Catephia: fore legs with thick rather long hairs; mid and hind legs with fans of long hairs on femora and tibia, the

former with one pair of terminal spurs, the latter with two, the outer twice as long as the inner.

Type L. (Catephia) pulchristrigata, Bethune-Baker, from

New Guinea (Nov. Zool. xiii. p. 253, 1906).

Ophiusa roulera, nov.

and below bright ochreous; abdomen and wings purplish black; fore wings with an erect white medial band, with a round small outward projection above the middle, and inwards in the middle, the lower half of the band broader than the upper; the band is not so broad as in O. schraderi, Felder, from Australia, and is without the two black spots that are so conspicuous in that species; a white mark on the costa outside the band and some white flecks on various parts of the wing: hind wings without markings; cilia of both wings pure white. On the underside the wings are uniformly black, cilia as above; legs ochreous; tarsi brown, with whitish rings.

Expanse of wings $1\frac{7}{10}$ inch. Ké Island; one example.

Can be easily distinguished from O. schraderi, Felder, or O. latizona, Butler, by its unmarked pure white cilia; in both those species the cilia are variegated with large uniform black patches.

Genus UGANA, nov.

3. Palpi upturned, long, second and third joints of similar lengths, first about half as long as the others, all of about the same thickness, covered with short bristles, the end of third joint blunt; antennæ two-thirds the length of the costa, with short bristly bipectinations of even length almost close up to the tips, where they shorten suddenly; mid tarsi with one pair of spurs (a very long and a very short one), hind tarsi with two pairs; body slender; abdomen extending beyond the hind wings and curving upwards: fore wings with costa a little bent towards the apex, hinder margin nearly as long, slightly concave in the middle, outer margin somewhat rounded; hind wings with the outer abdominal margins rounded; veins 3 and 4, and 5, 6, and 7 from the lower and upper angles of the cell; hind wings with vein 2 from one-third before end of cell, 3, 4, and 5 from lower end, 6 and 7 from upper end.

Ugana piana, nov.

d. Uniform olive-brown, paler and shaded with ochreous beneath; reniform small and pale, orbicular formed by two curved lines, which in some examples are joined at both ends; a straight black line from the abdominal margin one-third from base to one-third from apex of fore wings, where it is sharply angled inwards on to the costa, and a waved and somewhat outwardly dentated black line just outside the straight line; a blackish suffused and indistinct discal band somewhat close to the margin, which contains a row of whitish dots on the veins; the dots run across both wings, but the blackish shade is confined to the fore wings; some very minute whitish dots close to the margin; marginal line black; cilia black, with a whitish basal line. Underside with two outwardly curved brown medial lines across both wings and a pale thick discal line.

Expanse of wings 2 inches.

Entebbe, Uganda; five examples.

There are two examples in the B. M. unnamed from Uganda and Sierra Leone, Quadrifid Drawer 42.

XIV.—The Collections of William John Burchell, D.C.L., in the Hope Department, Oxford University Museum.

IV. On the Lepidoptera Rhopalocera collected by W. J. Burchell in Brazil, 1825-1830. By J. C. MOULTON, of Magdalen College, Oxford.

[Continued from p. 20.]

VI. NYMPHALINÆ (continued).

Phyciodes hera, Cram., = ithra, Kirby.

28. 10. 25. = 1076. Minas Geraës. (As 635.) 30. 10. 25. = 1077. , "(In the forest). On the N.E. side of the arraial of São João de Něpomueéna."

Bz. + 6. 11. 25. = 1078. "At Capitao Leite's." Minas Geraës.

 11. 25. 3= 1079, 1080, 1081. Minas Geraës. "At Capitao Leite's."